10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

ABHD2 Polyclonal Antibody

Catalog # AP68242

Product Information

Application	WB, IF, ICC, E
Primary Accession	P08910
Reactivity	Human, Mouse
Host	Rabbit
Clonality	Polyclonal
Calculated MW	48315

Additional Information

Gene ID	11057
Other Names	ABHD2; LABH2; Abhydrolase domain-containing protein 2; Lung alpha/beta hydrolase 2; Protein PHPS1-2
Dilution	WB~~Western Blot: 1/500 - 1/2000. Immunofluorescence: 1/200 - 1/1000. ELISA: 1/40000. Not yet tested in other applications. IF~~1:50~200 ICC~~N/A E~~N/A
Format	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.09% (W/V) sodium azide.
Storage Conditions	-20℃

Protein Information

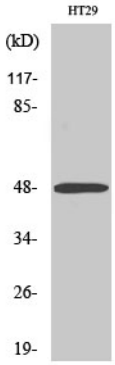
Name	ABHD2 (HGNC:18717)
Function	Progesterone-dependent acylglycerol lipase that catalyzes hydrolysis of endocannabinoid arachidonoylglycerol (AG) from cell membrane (PubMed:26989199). Acts as a progesterone receptor: progesterone-binding activates the acylglycerol lipase activity, mediating degradation of 1-arachidonoylglycerol (1AG) and 2- arachidonoylglycerol (2AG) to glycerol and arachidonic acid (AA) (PubMed:26989199). Also displays an ester hydrolase activity against acetyl ester, butanoate ester and hexadecanoate ester (PubMed:27247428). Plays a key role in sperm capacitation in response to progesterone by mediating degradation of 2AG, an inhibitor of the sperm calcium channel CatSper, leading to calcium influx via CatSper and sperm activation (PubMed:26989199). May also play a role in smooth muscle cells migration (By similarity).
Cellular Location	Cell projection, cilium, flagellum membrane; Single-pass type II membrane protein. Cell membrane; Single-pass type II membrane protein

Tissue Location	Present in sperm (at protein level).

Background

Progesterone-dependent acylglycerol lipase that catalyzes hydrolysis of endocannabinoid arachidonoylglycerol (AG) from cell membrane (PubMed:26989199). Acts as a progesterone receptor: progesterone-binding activates the acylglycerol lipase activity, mediating degradation of 1-arachidonoylglycerol (1AG) and 2-arachidonoylglycerol (2AG) to glycerol and arachidonic acid (AA) (PubMed:26989199). Plays a key role in sperm capacitation in response to progesterone by mediating degradation of 2AG, an inhibitor of the sperm calcium channel CatSper, leading to calcium influx via CatSper and sperm activation (PubMed:26989199). May also play a role in smooth muscle cells migration (By similarity).

Images



Western Blot analysis of various cells using ABHD2 Polyclonal Antibody

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.